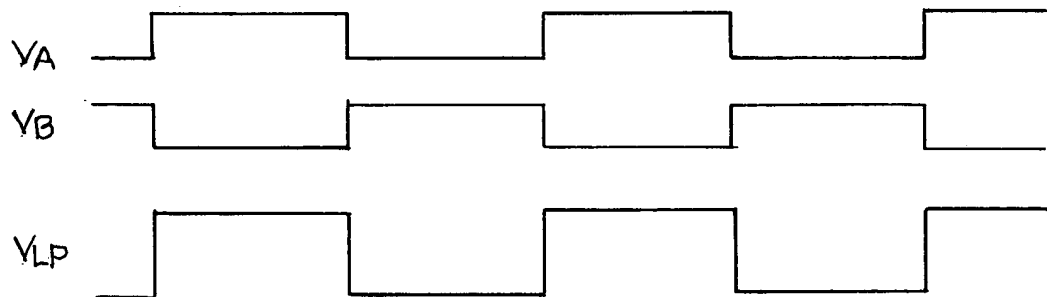


A) SQUARE WAVE DRIVE



B) HIGH EFFICIENCY DRIVE

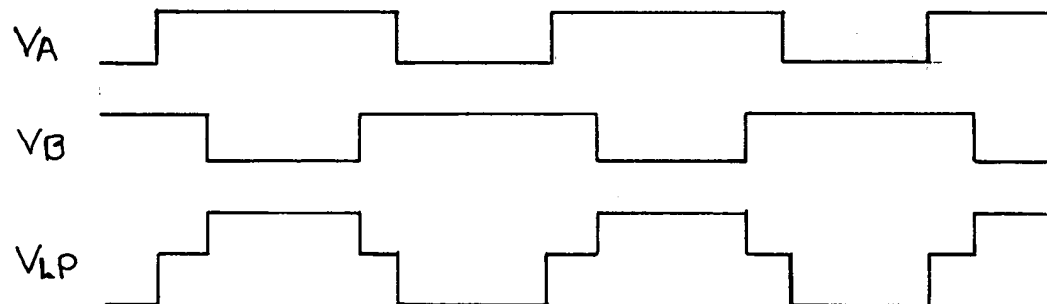


Fig. 2

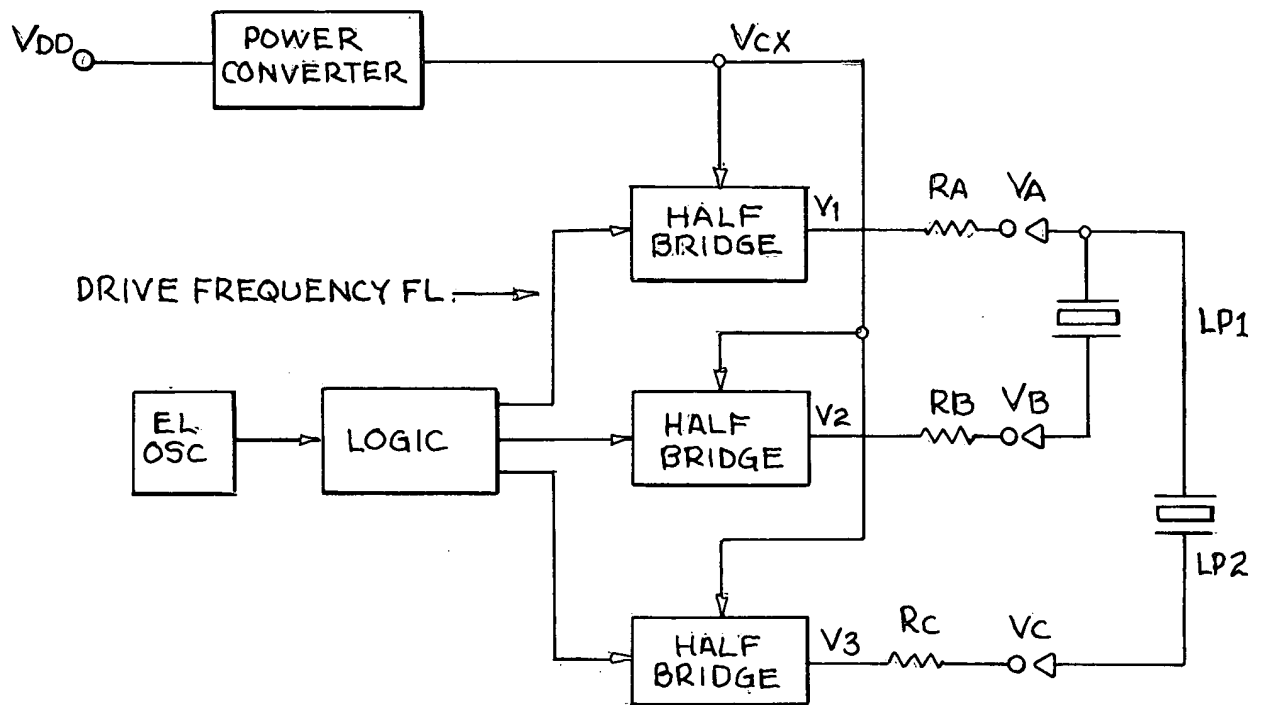
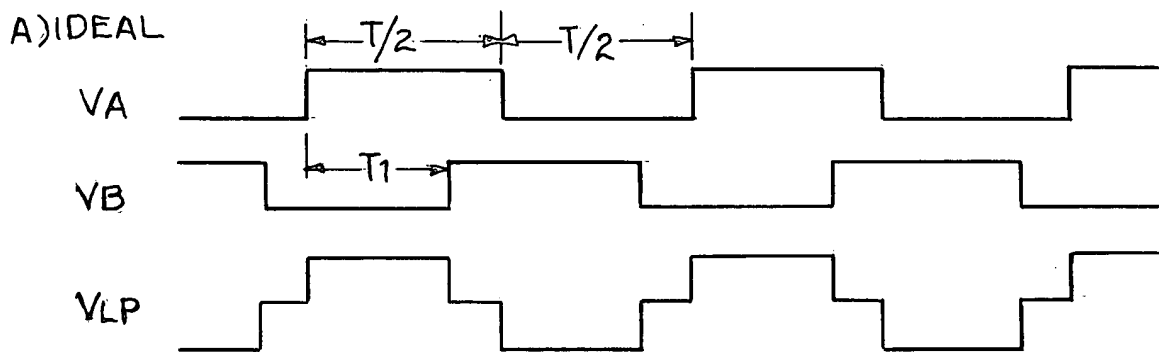


FIG. 3 MULTIPLE OUTPUT EL LAMP DRIVER



B) WITH SOURCE RESISTANCE

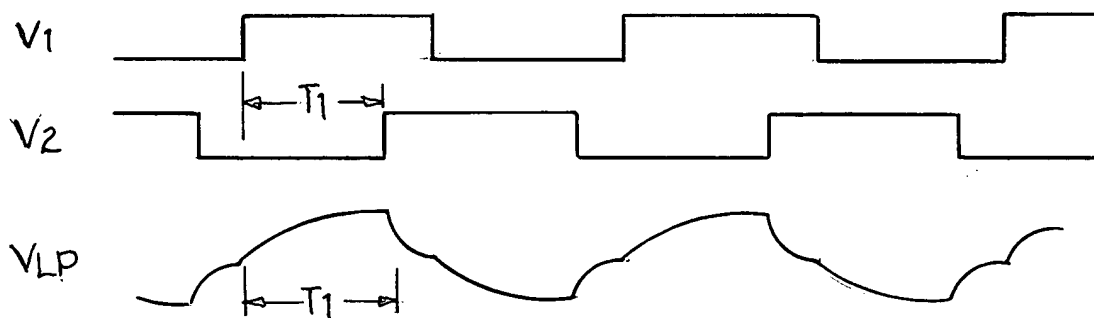


FIG. 4 PHASE SHIFTED DRIVE WAVEFORMS

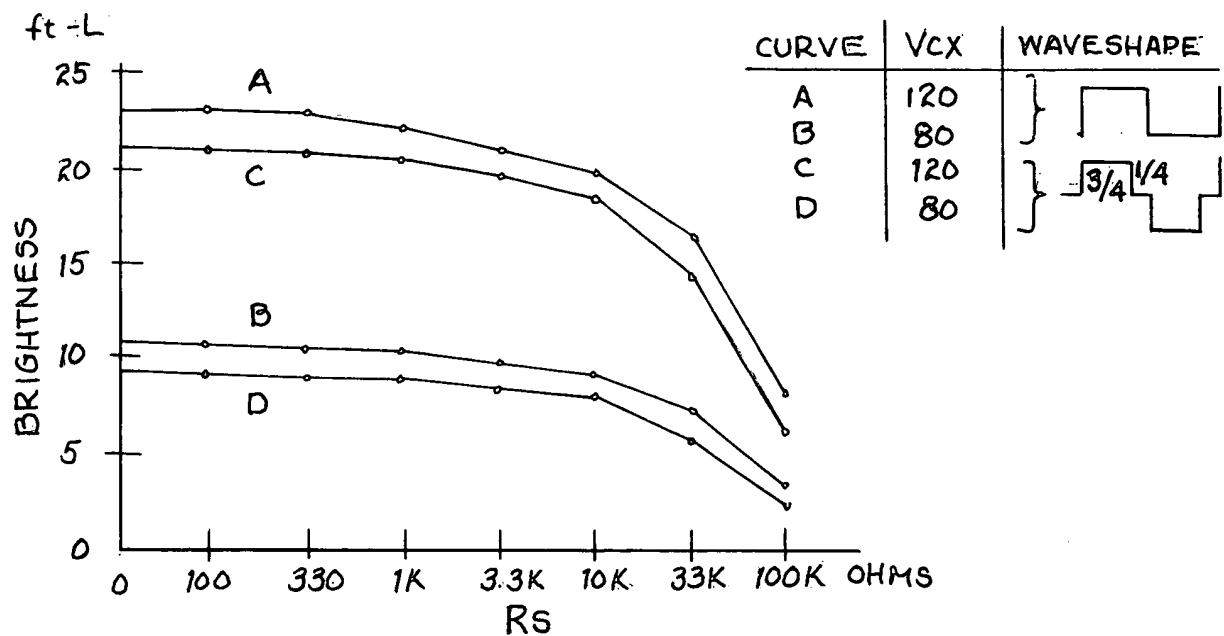


FIG. 5 LAMP BRIGHTNESS VS SERIES RESISTANCE R_s
 $F=500\text{ Hz}$ 19x50mm LAMP

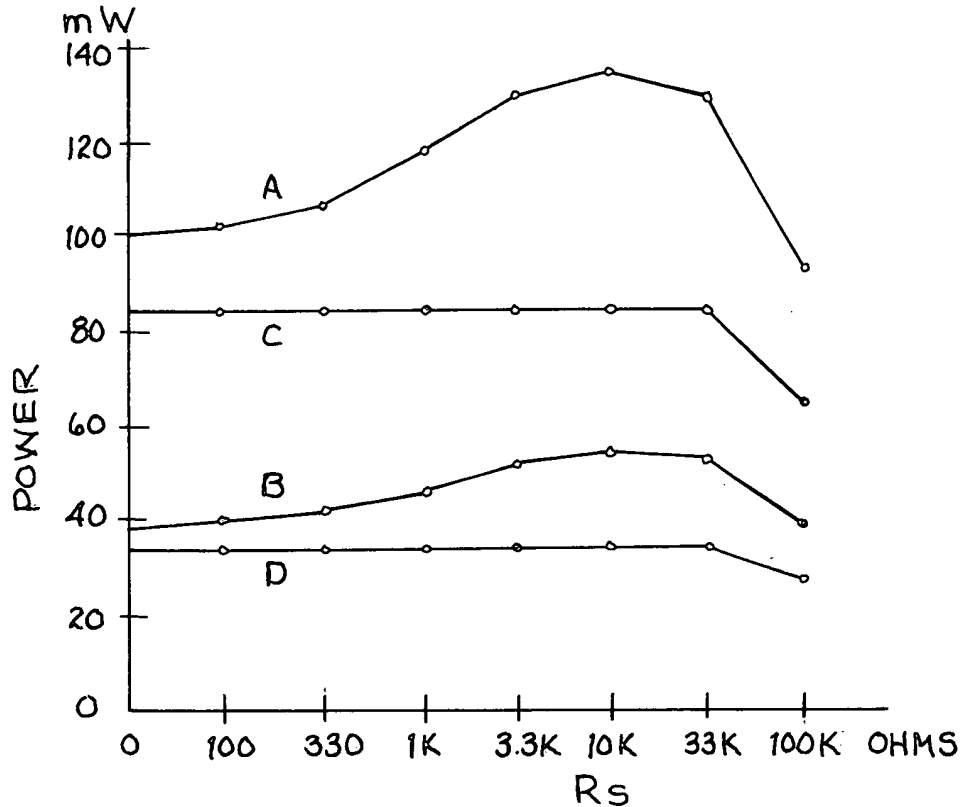


FIG. 6 LAMP POWER VS SERIES RESISTANCE
 $F=500\text{ Hz}$ 19x50mm LAMP

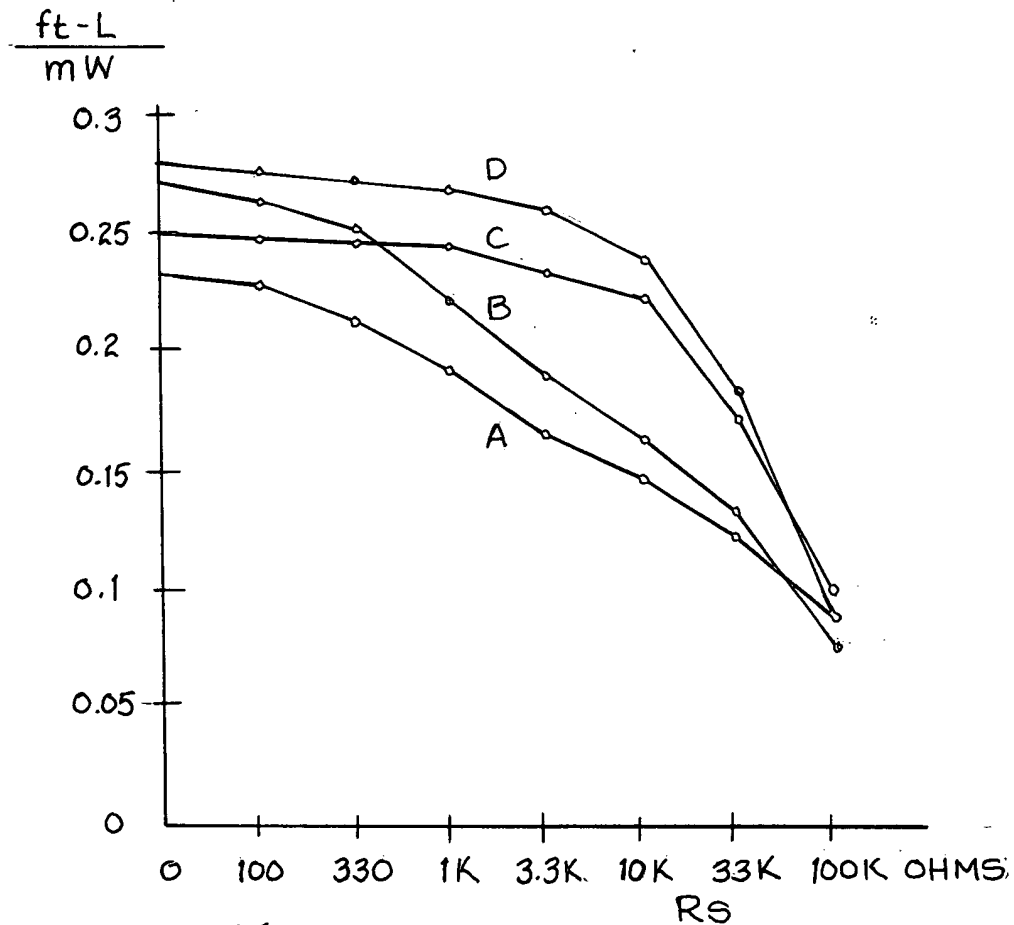


FIG. 7 LAMP EFFICIENCY VS SERIES RESISTANCE
F=500 HZ 19x50 mm LAMP

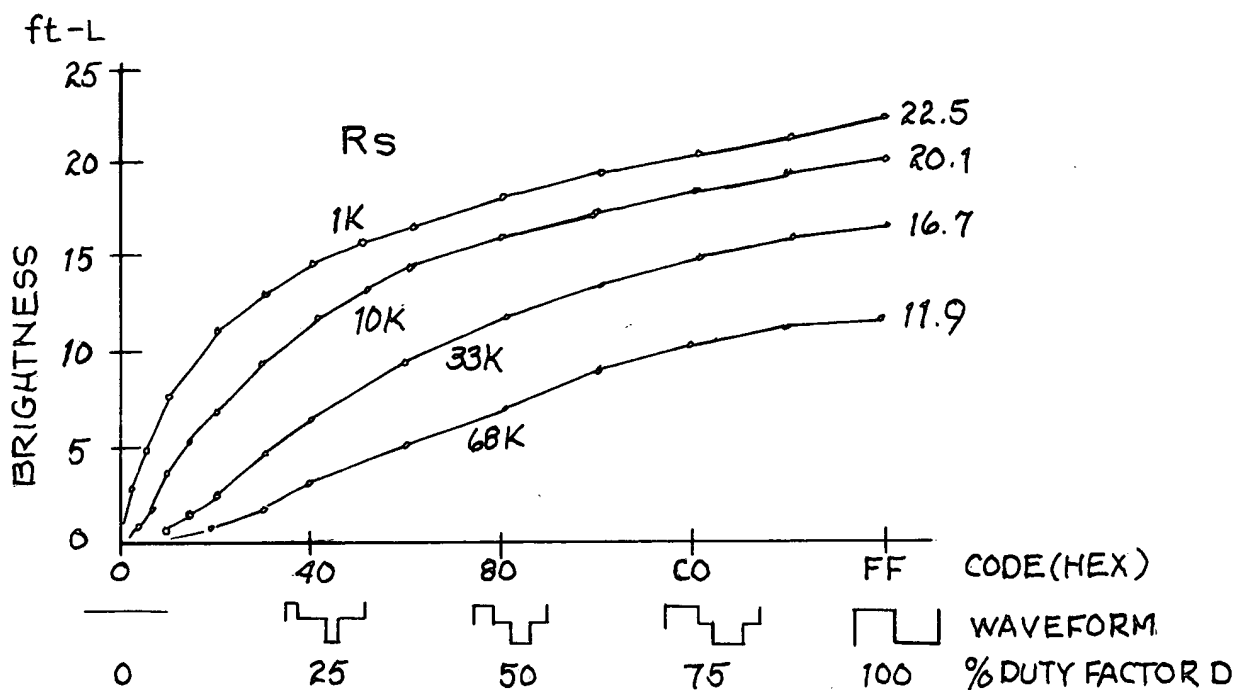


FIG. 8 LAMP BRIGHTNESS VS DUTY FACTOR
 $V_{CX} = +120$ $F = 500$ HZ 19x50 mm LAMP

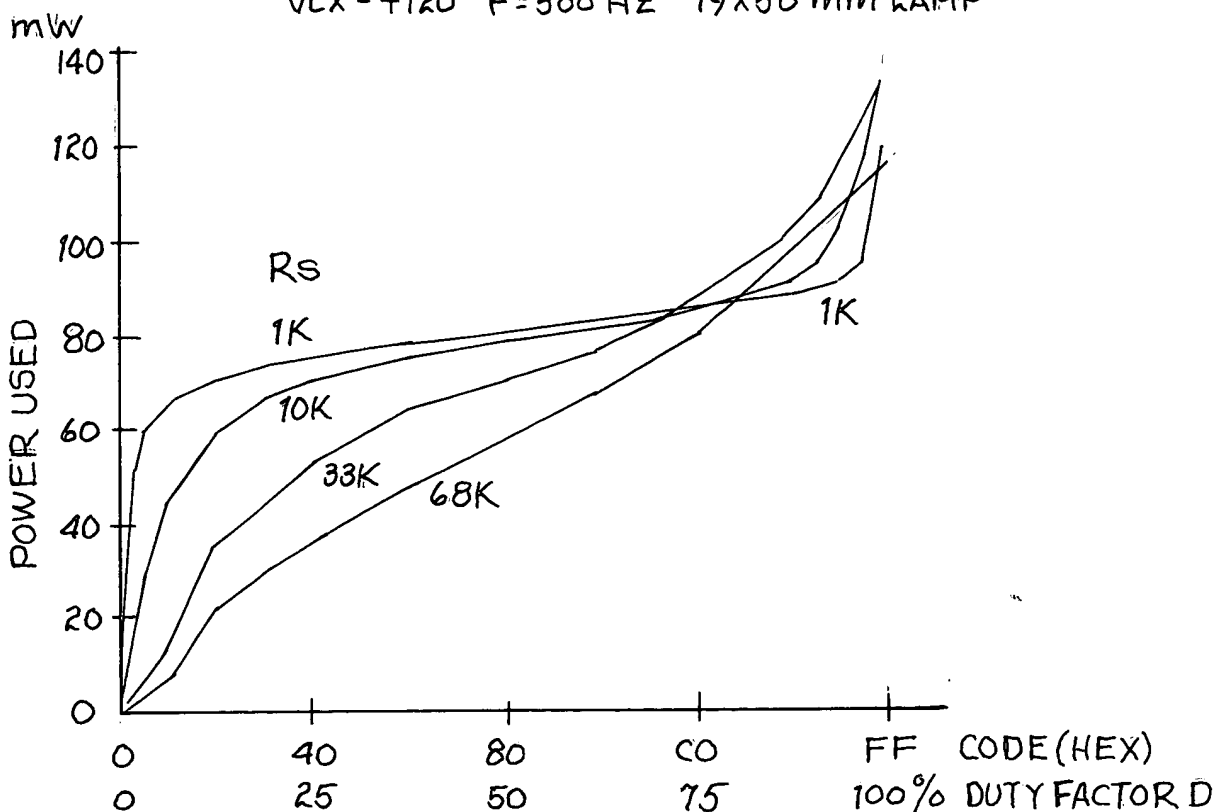


FIG. 9 LAMP POWER VS DUTY FACTOR
 $V_{CX} = +120$ $F = 500$ HZ 19x50 mm LAMP

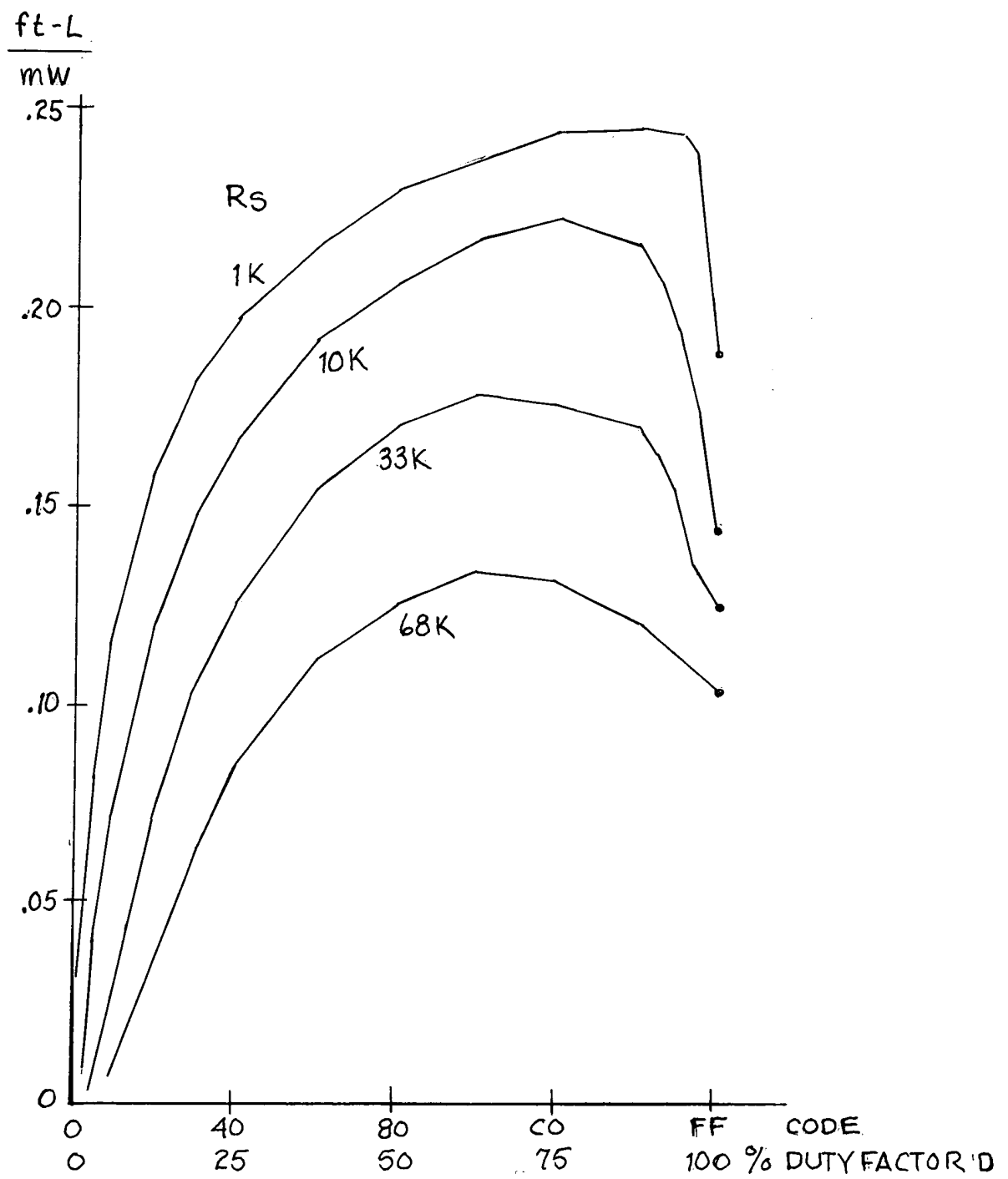


Fig. 10 LAMP EFFICIENCY VS DUTY FACTOR

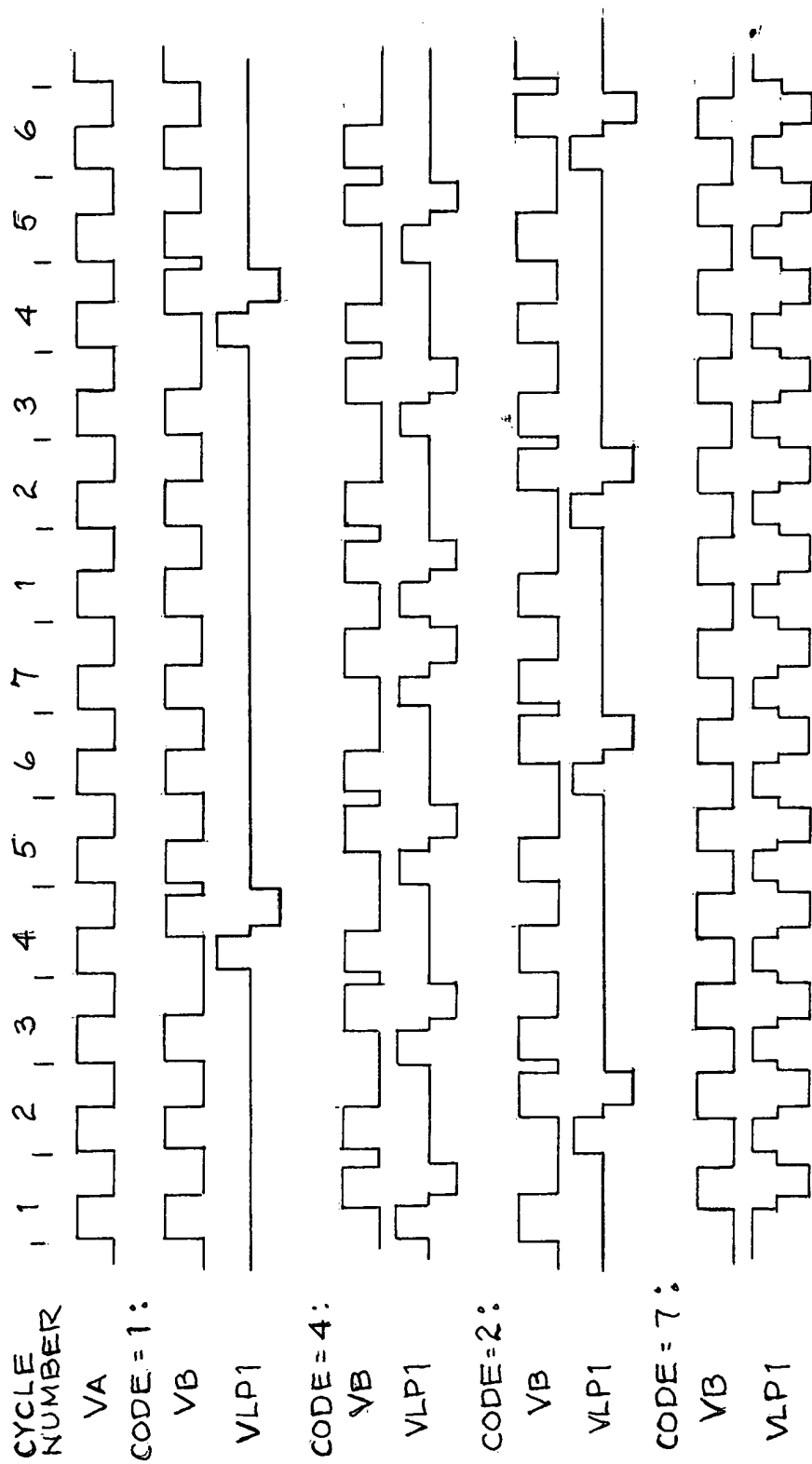


Fig. 11 AVERAGE FREQUENCY CONTROL

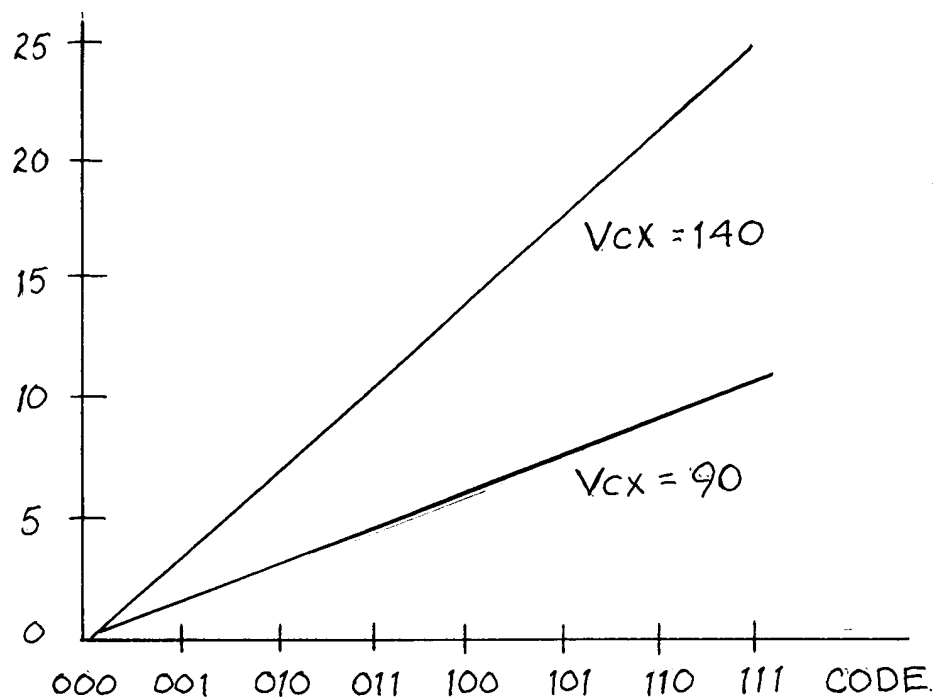


Fig. 12 METHOD 2 - BRIGHTNESS
 $F = 500 \text{ Hz}$ 19 X 50 mm LAMP
 $R_S = 3.3 \text{ K}\Omega$ 3/4 : DUTY PULSES

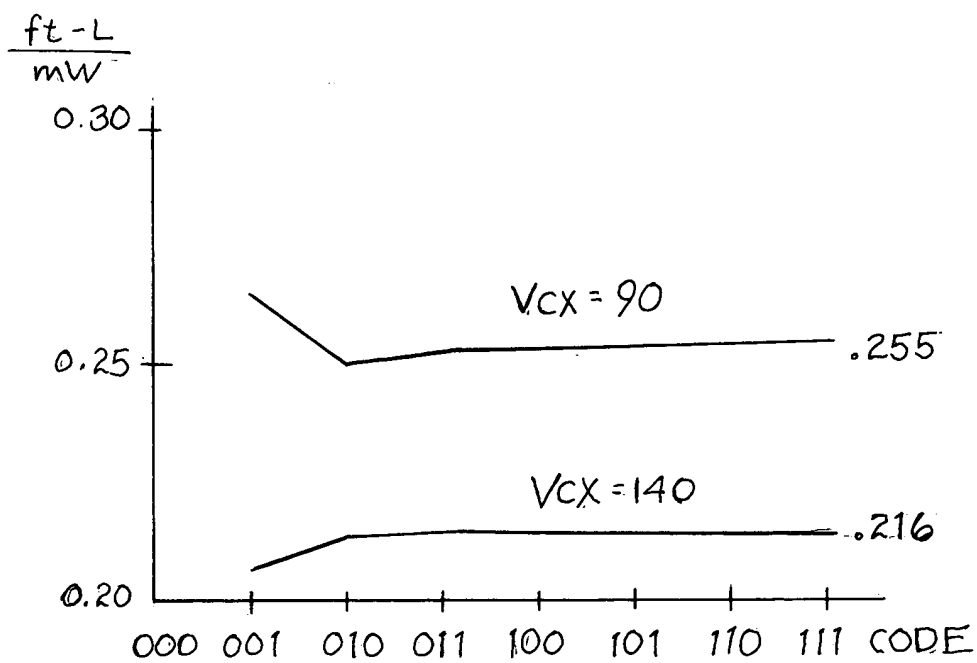


Fig. 13 METHOD 2 EFFICIENCY

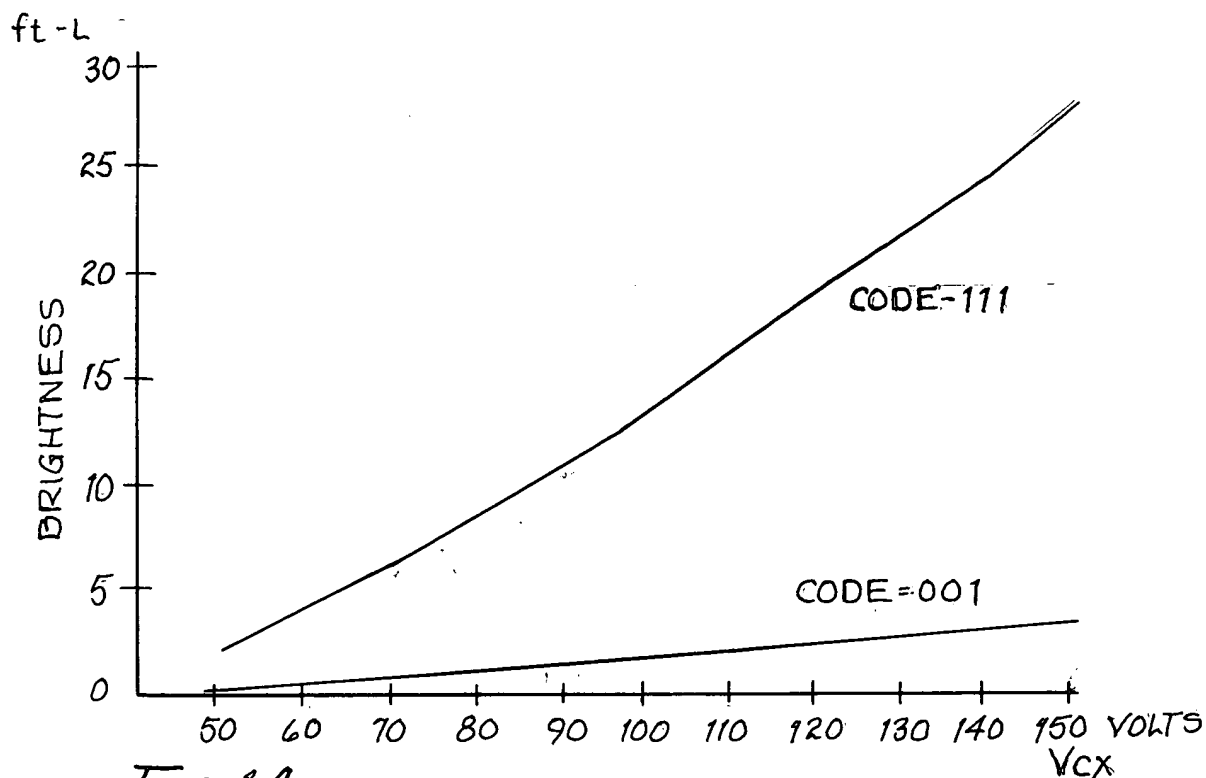


FIG. 14 METHOD 2 BRIGHTNESS VS V_{cx}
 $F=500\text{ Hz}$ 19x50mm LAMP
 $R_S=3.3K$ 3/4:1/4 DUTY PULSES

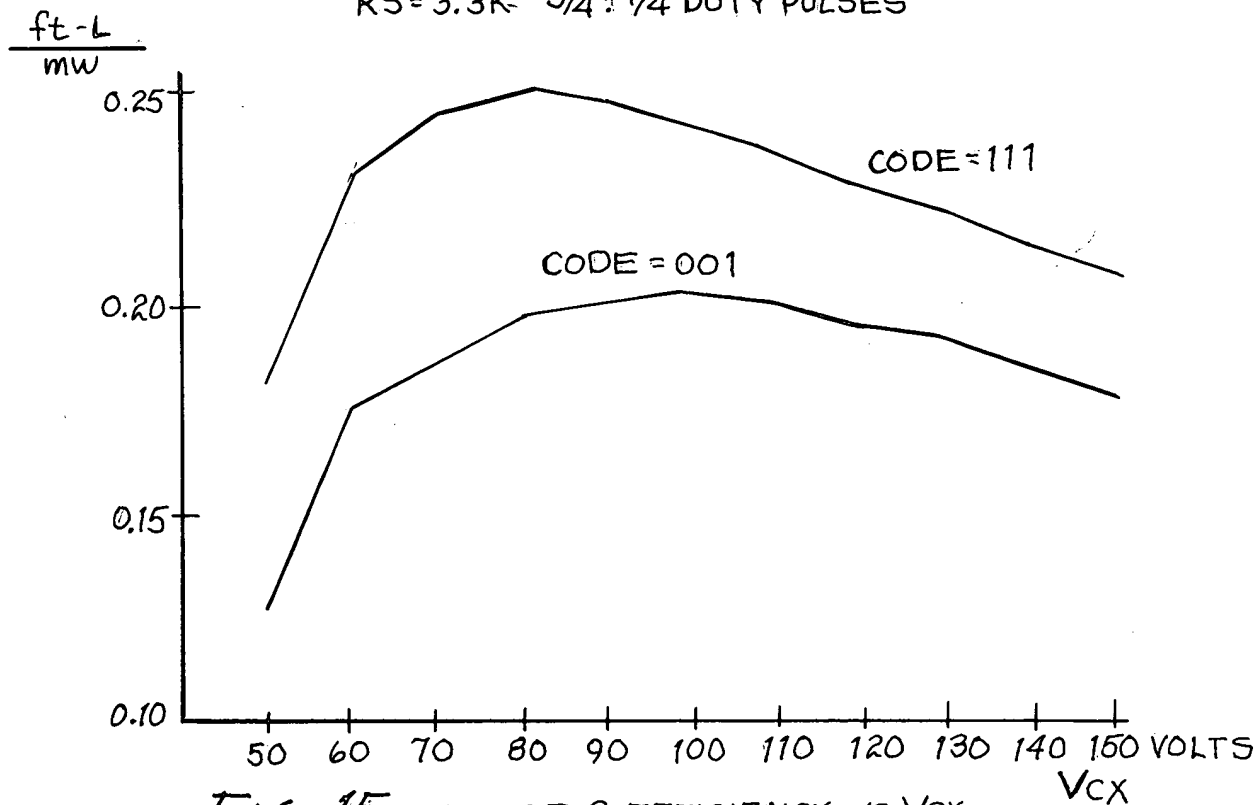


FIG. 15 METHOD 2 EFFICIENCY VS V_{cx}
 $F=500\text{ Hz}$ 19x50 mm LAMP
 $R_S=3.3K$ 3/4:1/4 DUTY PULSES

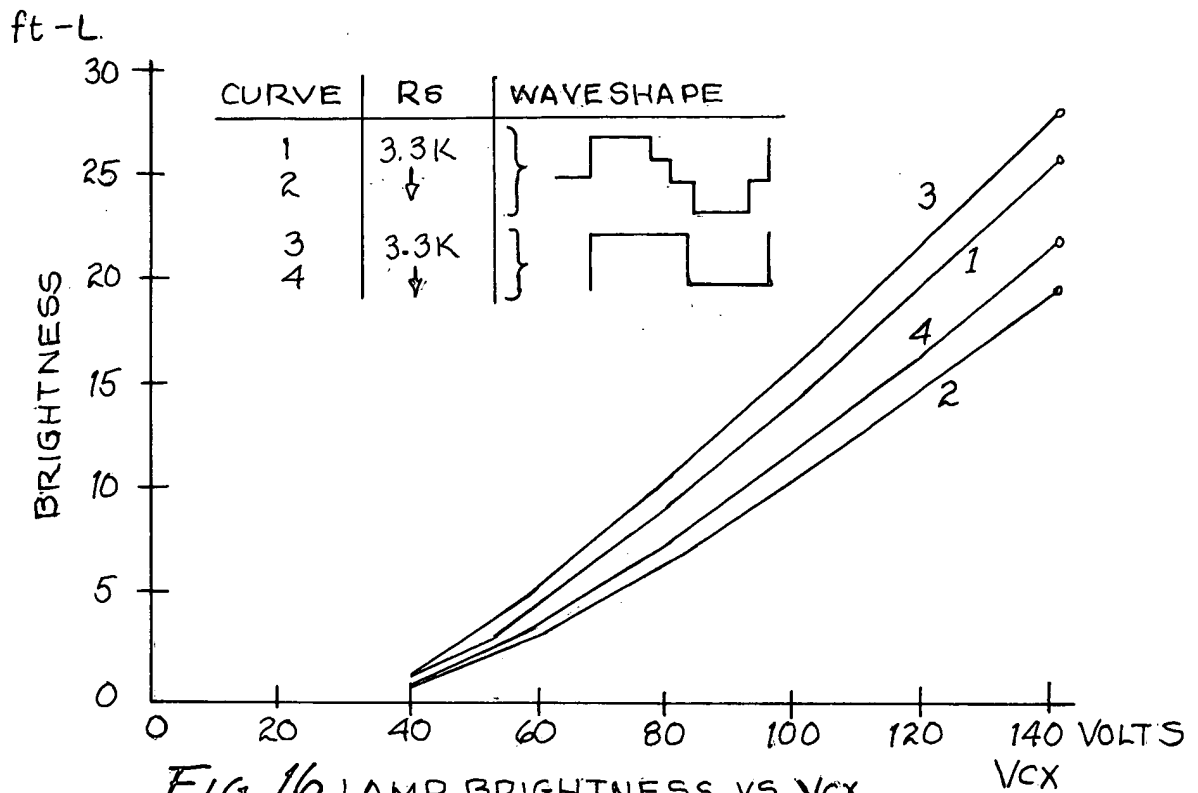


FIG. 16 LAMP BRIGHTNESS VS V_{CX}
F=500HZ 19X50mm LAMP

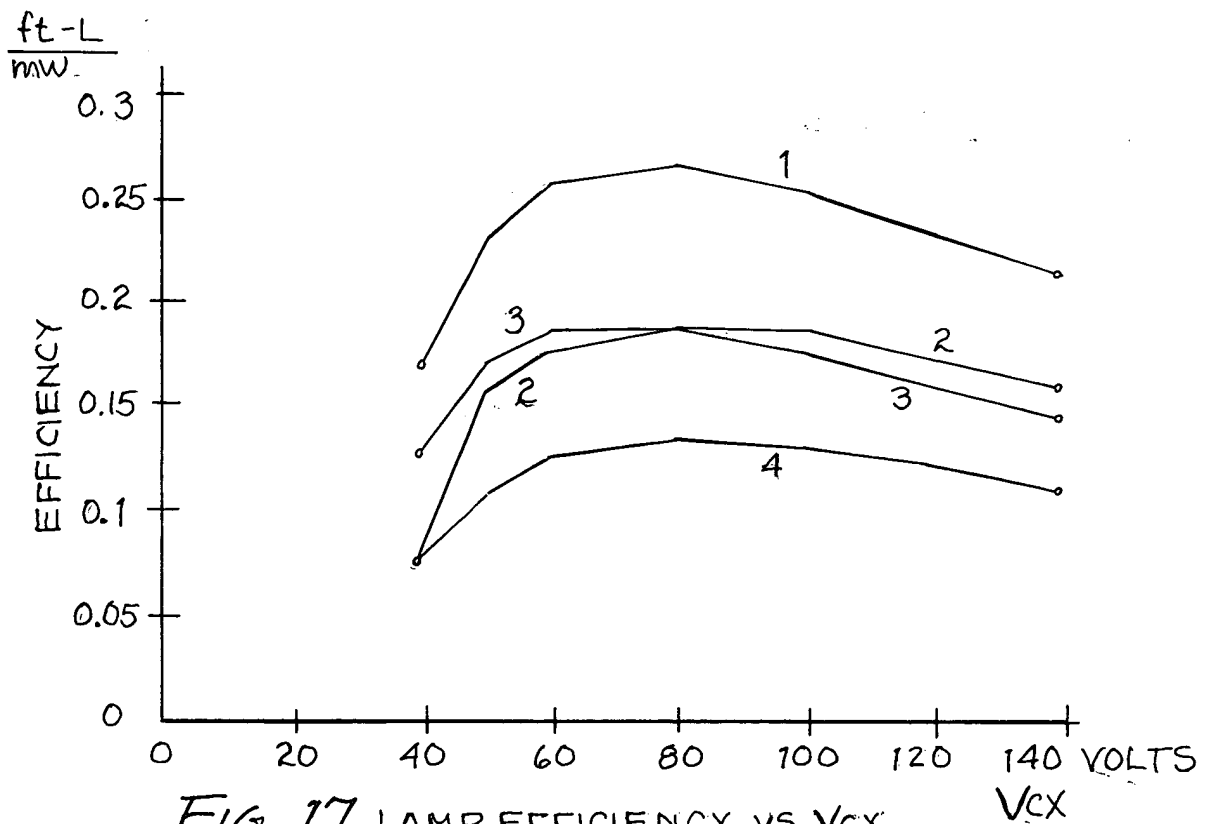


FIG. 17 LAMP EFFICIENCY VS V_{CX}
F=500HZ 19X50mm LAMP

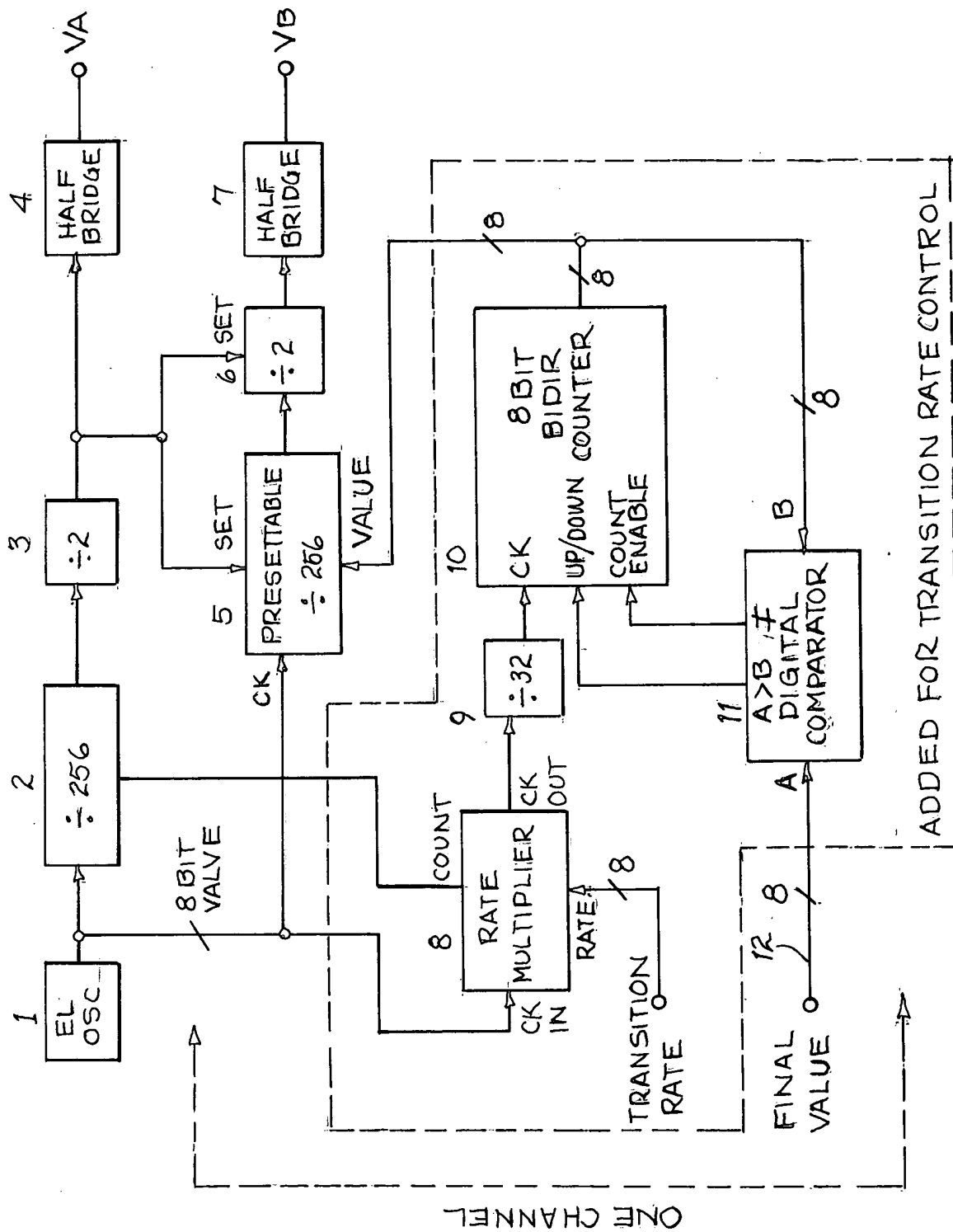


Fig. 18 VARIABLE TRANSITION RATE PHASE CONTROL

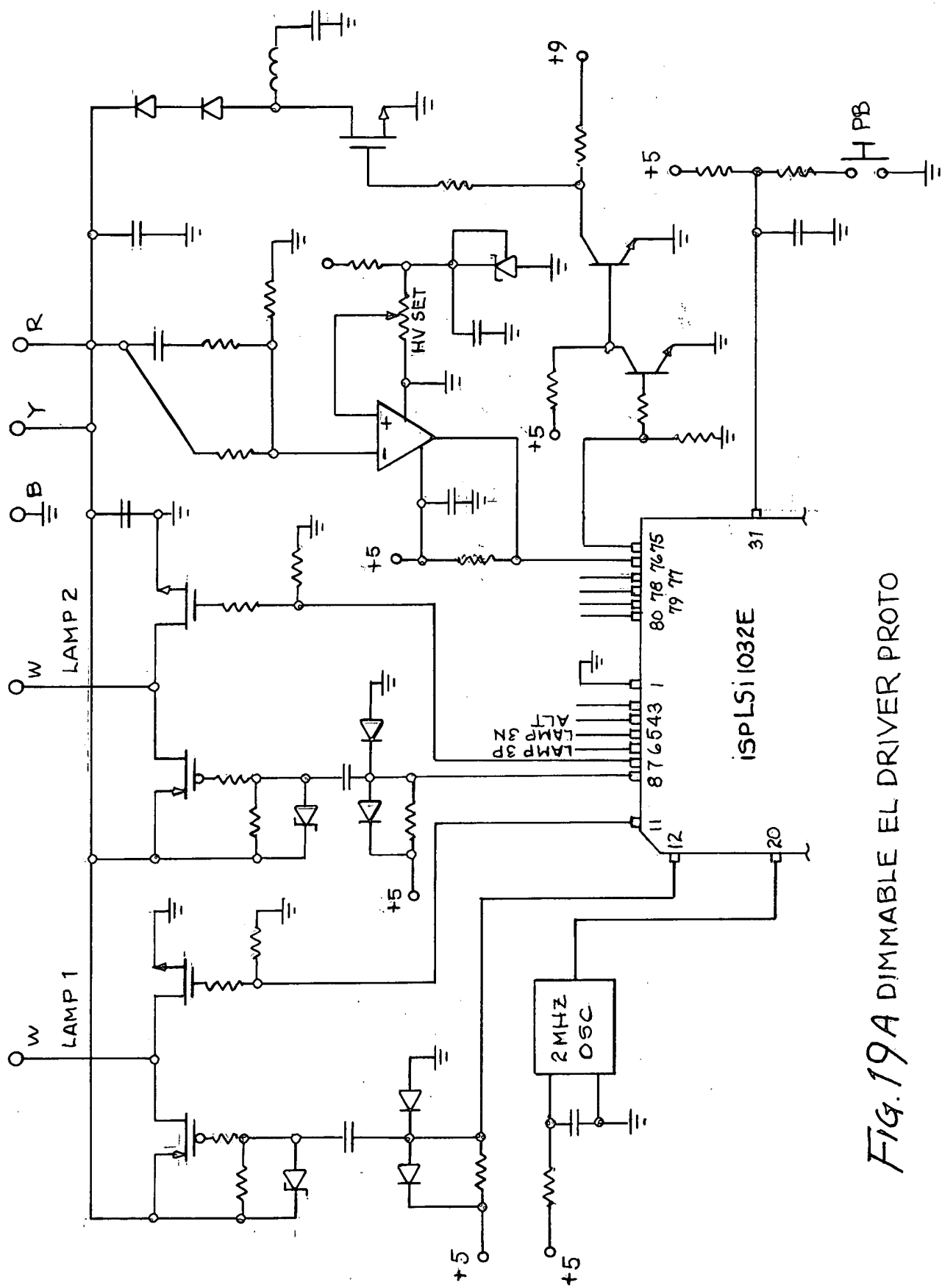


Fig.19A DIMMABLE EL DRIVER PROTO

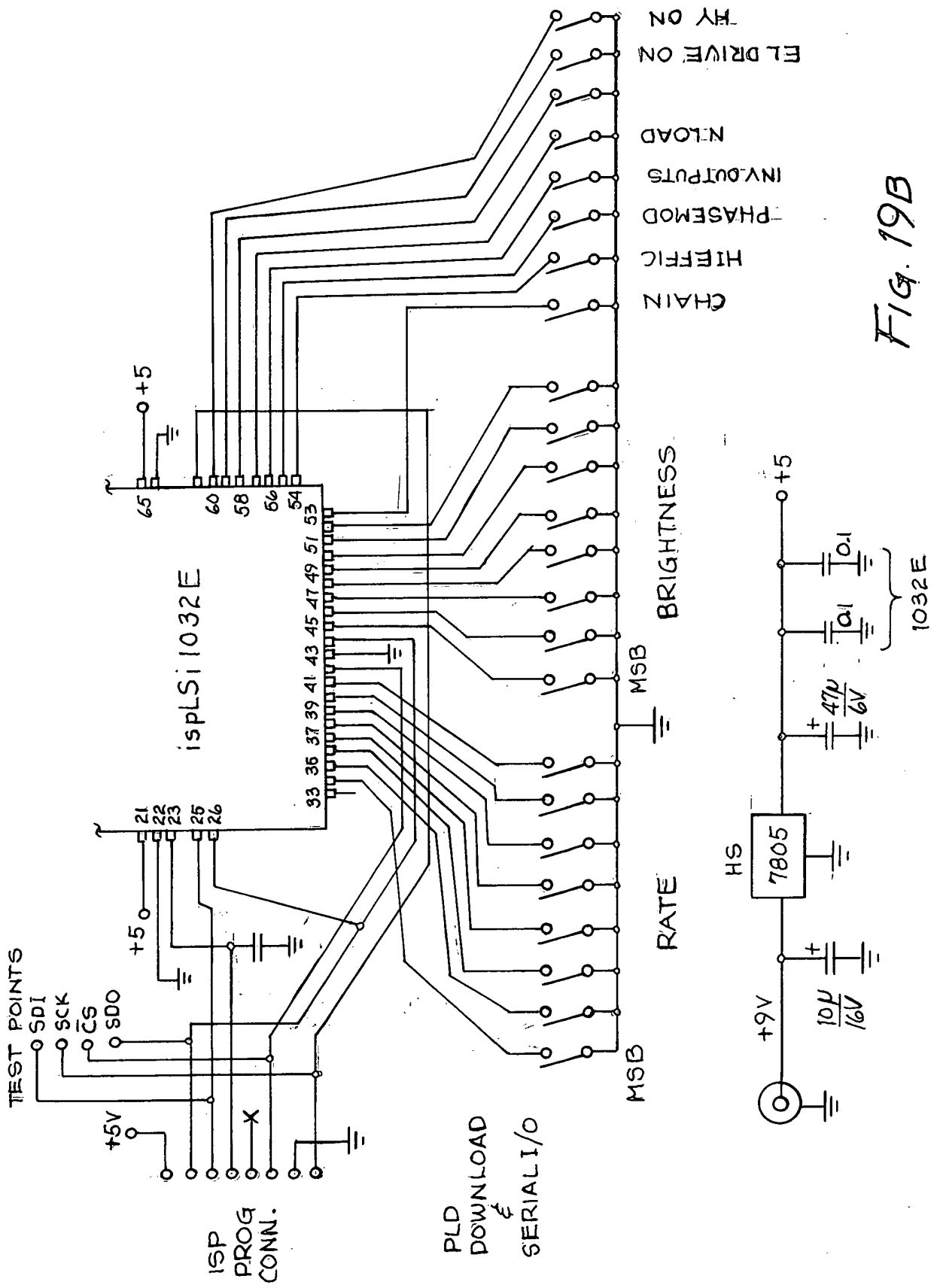


Fig. 19B